

## STRESZCZENIE W JĘZYKU ANGIELSKIM

In recent years, a very rapid increase in the incidence of papillary thyroid carcinoma (PTC) has been observed at a low stage. The prognosis in PTC is very good, about 95% of patients survive 10 years. In autopsy, foci of papillary thyroid micro-cancer were found in 36,5% of people who died of other causes. Therefore, in relation to PTC, overdiagnosis and over-treatment are described. So far, the course of the disease has been characterized by worse prognosis and was associated with unfavorable histoclinical features and the presence of somatic mutation *BRAF* V600E or co-occurrence of mutations in the *BRAF* V600E and *TERT* gene. Prognostic factors contributing to the unfavorable course of PTC are still poorly understood. It seems important to know the molecular predictive factors of germinal type, the knowledge of which would allow to estimate the prognosis of the patient before the procedure. The literature data show several molecular predictive factors of germinal type, e.g. polymorphism rs966423 in *DIRC3* gene (*Disrupted In Renal Carcinoma 3*), which is attributed with prognostic significance in patients with PTC and correlation with worse prognosis and increased risk of death.

The aim of the dissertation was to assess the prognostic significance of *DIRC3* gene rs966423 polymorphism in patients with PTC.

The study included 1466 patients and 309 healthy people from one centre. The source of demographic and histoclinical data was medical records. After previous isolation of DNA from leukocytes of peripheral blood and paraffin blocks, genetic analysis based on qPCR reaction and Sanger sequencing was performed. The results of genotyping were statistically analysed to compare the prevalence of individual variants, and the severity and clinical course of DTC.

The study did not show a statistically significant relationship between the occurrence of variants (CC, CT and TT) of rs966424 polymorphism and histoclinical factors, response to treatment, observation time and mortality. Moreover, statistical analysis did not show a significant difference in the occurrence of individual polymorphic variants in the *DIRC3* gene between the study group and the control group.

The results obtained indicate that there is no correlation between the presence of the TT variant and the higher severity and worse clinical course of the DTC.